

WP WG49N9-17

RTCA SC209 proposal to have more than one Level 2 transponder “classification”.

4.1 Level 2 transponder classification.

Discussion on Levels of transponders.etc WP WG49N9-13. Bev introduced the subject. Bob Saffel said that consideration was being given to a proposal to change the Transponder Level specification to allow two versions of a Level 2 Transponder. i.e. Level 2A which would contain the full current ICAO specification and a version 2B which omitted the protocols for Multisite communications, Comm A capabilities, some of the broadcast capabilities and other items not in current use by Ground ATS providers.

The argument was that this would reduce cost of certification on the manufacturers and the airline industry and they would not be implementing functions that are never likely to be used.

WG49 response was that the Level of the transponder is an ICAO issue and if any change was to be made it's application date could not be before a suitable time after the next Panel meeting of ASP (which is currently scheduled for 2008 leading to an earliest application date of late 2009).

The WG felt strongly that to change the Transponder Level specification in this way could cause great confusion and was unnecessary because the Mode S transponder is simply a modem. All properly certified Level 2 transponders produced for international use as required by ICAO to date have been to the full current ICAO specification and therefore no significant benefit is seen in that proposed change. There is however room for manoeuvre in the area of the GFM, which is an ADLP function even though it is being implemented in the transponder. It is conceivable that a transponder labeling system for certification purposes, could be derived (say Level 2-C1 and Level 2-C2 etc.) The C1 and C2 referring to the communications functions implemented in the GFM e.g. No Comm. A, no multisite communications, no linked Comm A or B, etc.

It was pointed out that “Dataflash”, which could be required in the reasonably near future for EHS in some states would need all the functionality including multisite linked Comm A and linked Comm B.